

KineticSystems Corporation

Standardized Data Acquisition and Control Systems

3112

8-channel, 12-bit D/A Converter

©1977, 1987
(Rev. Feb. 87)

FEATURES

- Eight independent analog outputs
- 10 volt output
- 12-bit resolution for each output
- 5 milliampere drive capability
- 4 microsecond settling time

APPLICATIONS

- Drive panel meters
- Drive strip chart recorders
- Drive x-y recorders
- Provide set point input to servos
- Provide input to programmable power supplies

GENERAL DESCRIPTION

The Model 3112 is a single-width CAMAC module for generating eight output voltages. The standard output is 0 to 10 volts at 5 milliampere maximum. A 12-bit register is provided for each channel. Strap options are provided so that the output range of each channel can be changed in the field to 0 to +5 volts, ± 10 volts, ± 5 volts, or ± 2.5 volts, independent of the setting of the other channels. The data is two's complementary and right justified (the LSB is written from Dataway line W1). Settling time of the output to within $\frac{1}{2}$ LSB is less than 4 microseconds. The nonlinearity is less than $\pm \frac{1}{2}$ LSB. The output impedance is less than 100 megohms. Adjustments are provided for the zero and gain of each channel.

The outputs are referenced to a common ground (the module ground). In critical applications, these signals should be received by differential input circuits.

On power-up, the data registers are cleared.

FUNCTION CODES

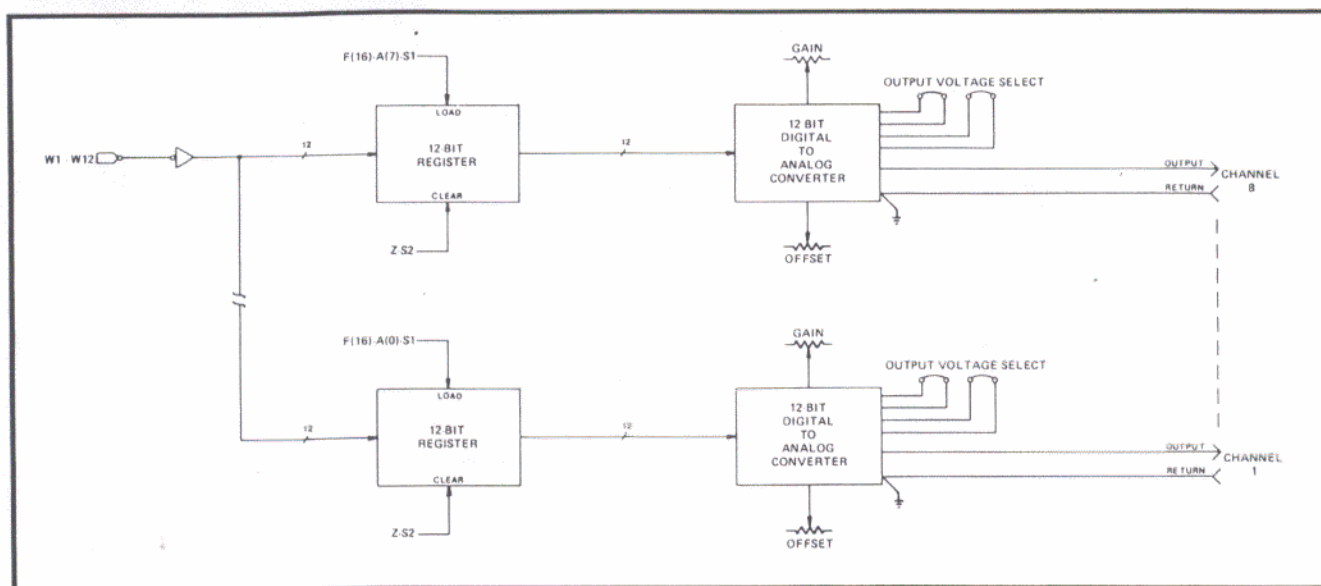
Command	Q	Action
F(16)·A(i) WT1	1	Writes the Data register i.
Z CZ	0	Clears the Data registers.

Notes: i can range from 0 to 7.
X = 1 for all valid addressed commands.



4

SIMPLIFIED BLOCK DIAGRAM



POWER REQUIREMENTS

- +6 volts — 400 mA
- +24 volts — 100 mA + load current
- 24 volts — 200 mA

ORDERING INFORMATION

Weight: .45 kg. (1 lb.)

- Model 3112-A1A** — 8-channel, 12-bit D/A Converter with Front-mounted Ribbon Connector
- Model 3112-M1A** — 8-channel, 12-bit D/A Converter with Front-mounted 2-contact LEMO Connectors
- Model 3112-P1A** — 8-channel, 12-bit D/A Converter with Rear-mounted P.C. Edge Connector

Accessories

Module	Mating Connector	Termination Panel
3112-A1A	5950-Z1A	1850-A1D
3112-M1A	5911-Z1A	—
3112-P1A	5960-Z1A or Z1B	1850-P1D